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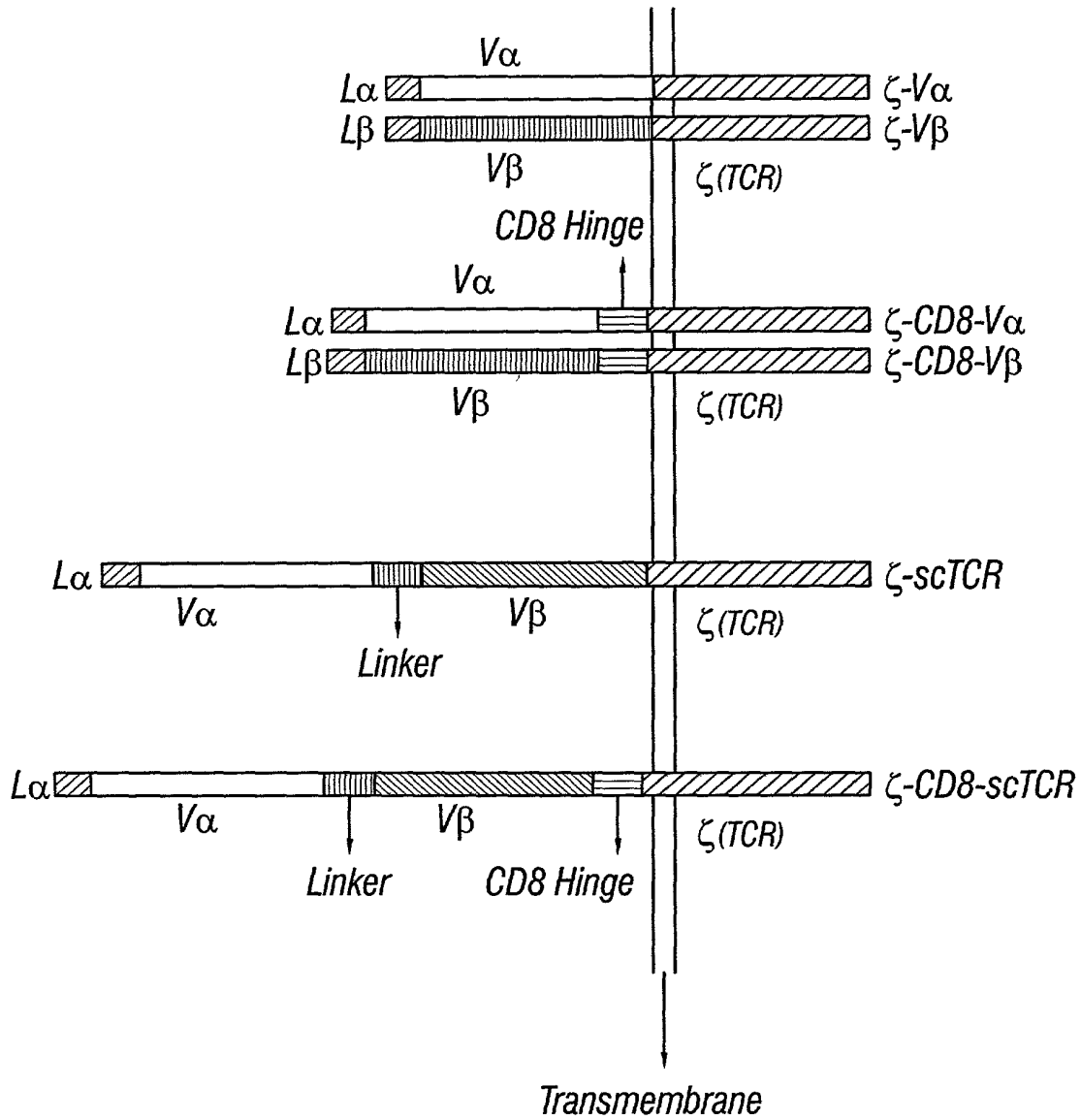


FIG. 1

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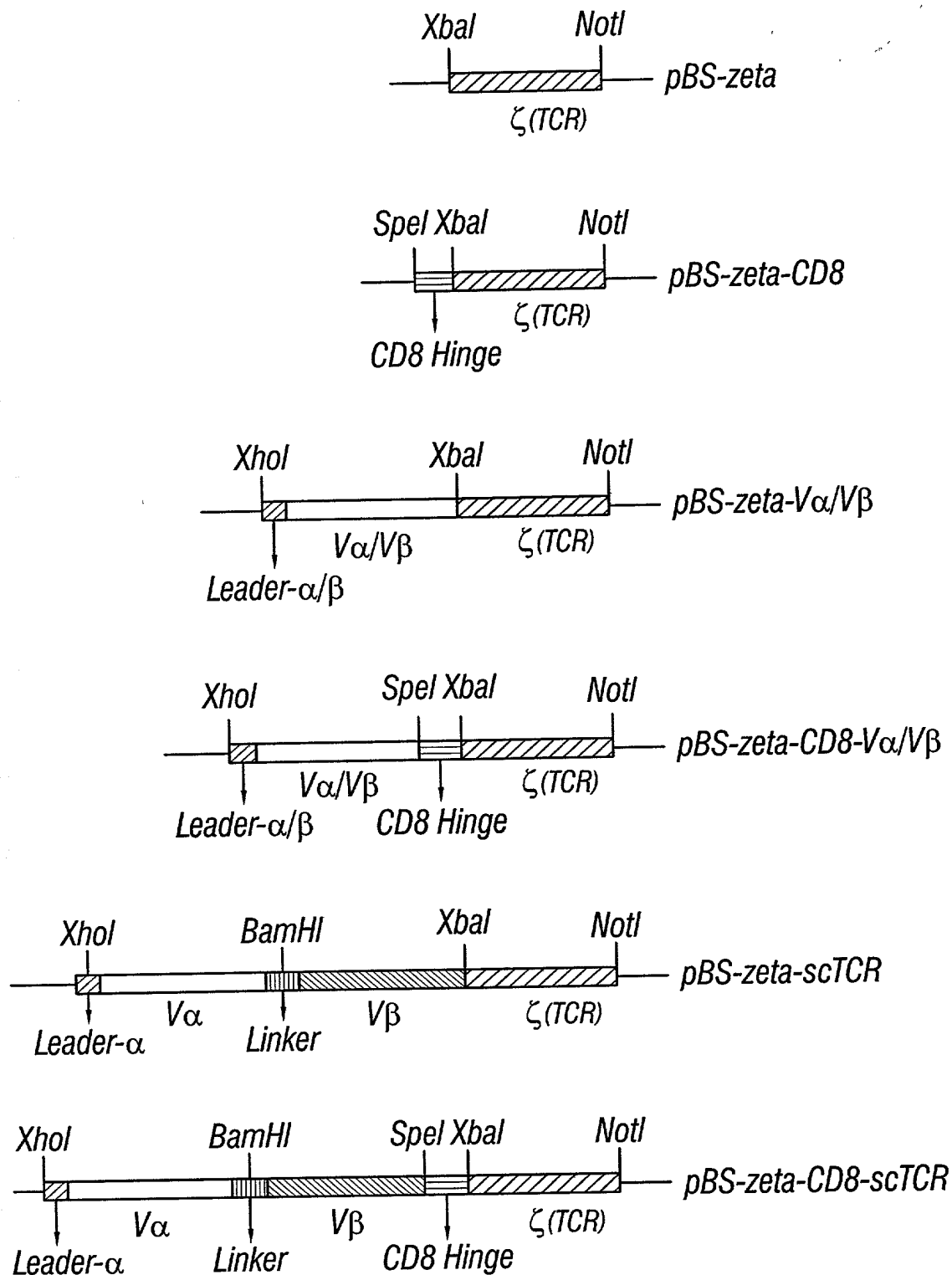


FIG. 2

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	9		18		27		36		45		54							
CTC	GAG	ATG	CAG	AGG	AAC	CTG	GGA	GCT	GTG	CTG	GGG	ATT	CTG	TGG	GTG	CAG	ATT	[SEQ ID NO: 1]

L	E	M	Q	R	N	L	G	A	V	L	G	I	L	W	V	Q	I	[SEQ ID NO: 2]

	63		72		81		90		99		108							
TGC	TGG	CTG	AAA	GAA	CAG	CAA	GTG	CAG	CAG	AGT	CCC	GCA	TCC	TTG	GTT	CTG	CAG	

C	W	L	K	E	Q	Q	V	Q	Q	S	P	A	S	L	V	L	Q	

	117		126		135		144		153		162							
GAG	GGG	GAG	AAC	GCA	GAG	CTC	CAG	TGT	AGC	TTT	TCC	ATC	TTT	ACA	AAC	CAG	GTG	

E	G	E	N	A	E	L	Q	C	S	F	S	I	F	T	N	Q	V	

	171		180		189		198		207		216							
CAG	TGG	TTT	TAC	CAA	CGT	CCT	GGG	GGA	AGA	CTC	GTC	AGC	CTG	TTG	TAC	AAT	CCT	

Q	W	F	Y	Q	R	P	G	G	R	L	V	S	L	L	Y	N	P	

	225		234		243		252		261		270							
TCT	GGG	ACA	AAG	CAG	AGT	GGG	AGA	CTG	ACA	TCC	ACA	ACA	GTC	ATT	AAA	GAA	CGT	

S	G	T	K	Q	S	G	R	L	T	S	T	T	V	I	K	E	R	

	279		288		297		306		315		324							
CGC	AGC	TCT	TTG	CAC	ATT	TCC	TCC	TCC	CAG	ATC	ACA	GAC	TCA	GGC	ACT	TAT	CTC	

R	S	S	L	H	I	S	S	S	Q	I	T	D	S	G	T	Y	L	

FIG. 3A

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      333      342      351      360      369      378
TGT GCC TCA AAT TCT GGA GGA AGC AAT GCA AAG CTA ACC TTC GGG AAA GGC ACT
-----
C   A   S   N   S   G   G   S   N   A   K   L   T   F   G   K   G   T

      387      396      405      414      423      432
AAA CTC TCT GTT AAA TCA GGT GGC GGA GGG TCT GGC GGG GGT GGA TCC GGG GGT
-----
K   L   S   V   K   S   G   G   G   G   S   G   G   G   G   S   G   G

      441      450      459      468      477      486
GGA GGC TCA GAG GCT GCA GTC ACC CAA AGC CCA AGA AAC AAG GTG GCA GTA ACA
-----
G   G   S   E   A   A   V   T   Q   S   P   R   N   K   V   A   V   T

      495      504      513      522      531      540
GGA GGA AAG GTG ACA TTG AGC TGT AAT CAG ACT AAT AAC CAC AAC AAC ATG TAC
-----
G   G   K   V   T   L   S   C   N   Q   T   N   N   H   N   N   M   Y

      549      558      567      576      585      594
TGG TAT CGG CAG GAC ACG GGG CAT GGG CTG AGG CTG ATC CAT TAT TCA TAT GGT
-----
W   Y   R   Q   D   T   G   H   G   L   R   L   I   H   Y   S   Y   G

      603      612      621      630      639      648
GCT GGC AGC ACT GAG AAA GGA GAT ATC CCT GAT GGA TAC AAG GCC TCC AGA CCA
-----
A   G   S   T   E   K   G   D   I   P   D   G   Y   K   A   S   R   P

```

FIG. 3B

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657	666	675	684	693	702
AGC CAA GAG AAC TTC	TCC CTC ATT CTG	GAG TTG GCT ACC	CCC TCT CAG ACA	TCA	

S Q E N F S L Q L E L A T P S I T S					
711	720	729	738	747	756
GTG TAC TTC TGT GCC AGC	GGT GAG ACA GGG	ACC AAC GAA AGA	TTA TTT TTC	GGT	

V Y F C A S G E T G T N E R L F F G					
765	774	783	792	801	810
CAT GGA ACC AAG CTG	TCT GTC CTG ACT	AGT AAC TCC ATC	ATG TAC TTC	AGC CAC	

H G T K L S V L T S N S I M Y F S H					
819	828	837	846	855	864
TTC GTG CCG GTC TTC	CTG CCA GCG AAG	CCC ACC ACG ACG	CCA GCG CCG	CGA CCA	

F V P V F L P A K P T T T P A P R P					
873	882	891	900	909	918
CCA ACA CCG GCG CCC	ACC ATC GCG TCG	CAG CCC CTG TCC	CTG CGC CCA TCT	AGT	

P T P A P T I A S Q P L S L R P S S					
927	936	945	954	963	972
TCT AGA GAT CCC AAA	CTC TGC TAC CTG	CTG GAT GGA ATC	CTC TTC ATC TAT	GGT	

S R D P K L C Y L L D G I L F I Y G					

FIG. 3C

FIG. 3C

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981	990	999	1008	1017	1026
GTC ATT CTC ACT GCC TTG TTC CTG AGA GTG AAG TTC AGC AGG AGC GCA GAC GCC					

V I L T A L F L R V K F S R S A D A					
1035	1044	1053	1062	1071	1080
CCC GCG TAC CAG CAG GGC CAG AAC CAG CTC TAT AAC GAG CTC AAT CTA GGA CGA					

P A Y Q Q G Q N Q L Y N E L N L G R					
1089	1098	1107	1116	1125	1134
AGA GAG GAG TAC GAT GTT TTG GAC AAG AGA CGT GGC CGG GAC CCT GAG ATG GGG					

R E E Y D V L D K R R G R D P E M G					
1143	1152	1161	1170	1179	1188
GGA AAG CCG AGA AGG AAG AAC CCT CAG GAA GGC CTG TAC AAT GAA CTG CAG AAA					

G K P R R K N P Q E G L Y N E L Q K					
1197	1206	1215	1224	1233	1242
GAT AAG ATG GCG GAG GCC TAC AGT GAG ATT GGG ATG AAA GGC GAG CGC CGG AGG					

D K M A E A Y S E I G M K G E R R R					
1251	1260	1269	1278	1287	1296
GGC AAG GGG CAC GAT GGC CTT TAC CAG GGT CTC AGT ACA GCC ACC AAG GAC ACC					

G K G H D G L Y Q G L S T A T K D T					
1305	1314	1323	1332	1341	1350
TAC GAC GCC CTT CAC ATG CAG GCC CTG CCC CCT CGC TAA GCG GCC GCC ACC GCG					

Y D A L H M Q A L P P R * A A A T A					

FIG.3D

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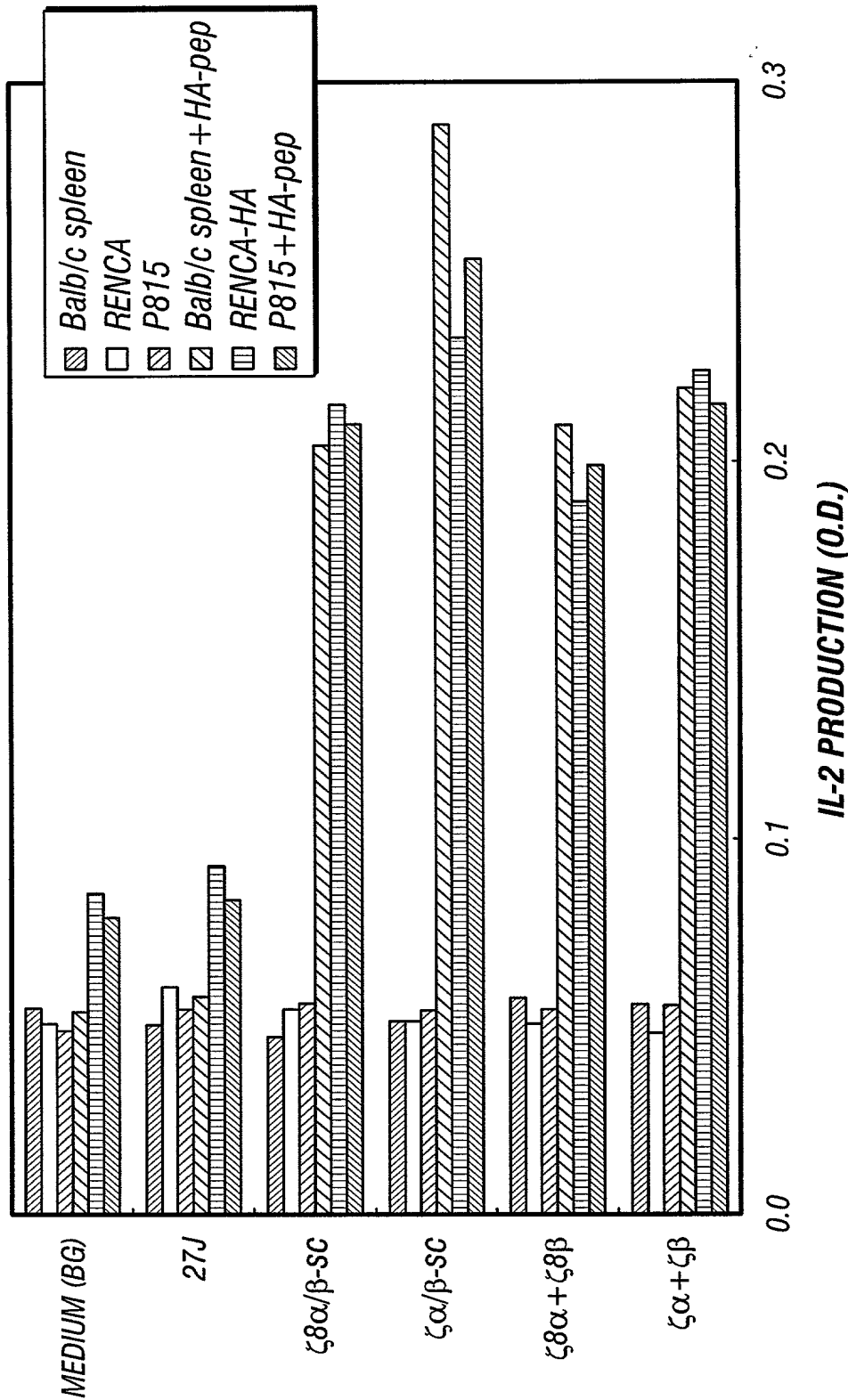


FIG.4

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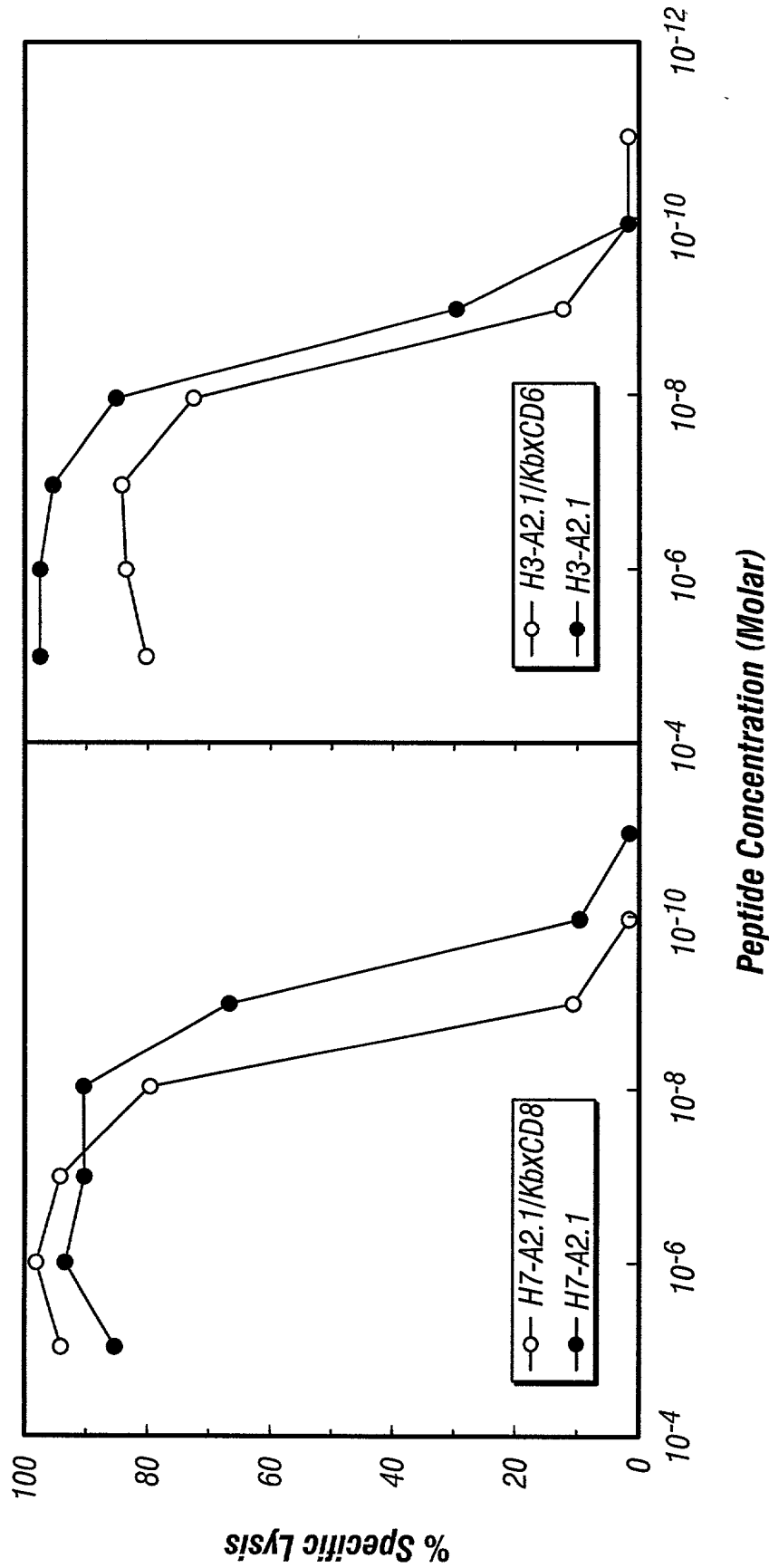


FIG. 5

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Alpha Groups

Vα1 CCC AAG GCA CTG ATG TTC ATC TTC [SEQ ID NO: 3]
Vα2 TGA GAC AAA GTC CCC AAT CTC TGA CAG [SEQ ID NO: 4]
Vα3 CTG CAG CTG CTC CTC AAG TAC TAT TC [SEQ ID NO: 5]
Vα4.1,2,3 TCC CGG AGA AGG TCC ACA GTT CCT CTT T [SEQ ID NO: 6]
Vα4.4 GAA GCA GCA GAG GGT TTG AAG CCA CAT AC [SEQ ID NO: 7]

2.

Vα5 GGC AGG TCT TCA GTT GCT TAT GAA GGT [SEQ ID NO: 8]
Vα6 GGT TCC TCT TCA GGG TCC AGA ATA TGT [SEQ ID NO: 9]
Vα7 GCG AAG AAC TCA CCC TGG ACT GTT CAT [SEQ ID NO: 10]
Vα8 GAG CTC CAC AGA CAA CAA GAG GAC GCA GCA [SEQ ID NO: 11]
Vα9 GAG CTG CGA CGT TCC TTA GTG ACT GTG [SEQ ID NO: 12]

3.

Vα10 CCT CGT CAG CCT GTT GTC CAA TCC TTC TGG [SEQ ID NO: 13]
Vα11 CAG CCT CAT CAA TCT GTT CTA CTT GGC T [SEQ ID NO: 14]
Vα12 CCA CCA GGG ACC ACA GTT TAT CAT TCA A [SEQ ID NO: 15]
Vα14 ACC TGG AGA GAA TCC TAA GCT CAT CAT [SEQ ID NO: 16]
Vα15 AGG TCT TGT GTC CCT GAC AGT CCT GGT T [SEQ ID NO: 17]

4.

Vα16 CAA GCA AAC ACT GTA GTG CAG AGC CCT TCC [SEQ ID NO: 18]
Vα17 CAA GAC ATC CAT AAC TGC CCT ACA G [SEQ ID NO: 19]
Vα18 GTG TAT GAA ACC CAG GAC AGT TCT TAC [SEQ ID NO: 20]
Vα19 CCG TAT TTC TTT CTT ATG TTG TTT TGG AT [SEQ ID NO: 21]
Vα20 CAA AGC TCT CCA TCG CTG ACT GTT CAA G [SEQ ID NO: 22]

FIG. 6A

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Beta Groups

1.

vβ1	ATC TAA TCC TGG GAA GAG CAA AT	[SEQ ID NO: 23]
vβ2	GGC GTC TGG TAC CAC GTG GTC AA	[SEQ ID NO: 24]
vβ3	GTG AAA GGG CAA GGA CAA AAA GC	[SEQ ID NO: 25]
vβ4	GAT ATG CGA ACA GTA TCT AGG C	[SEQ ID NO: 26]
vβ5.1	ACA TAA TCA AAG GAA AGG GAG AA	[SEQ ID NO: 27]

2.

vβ6	TCC TGA TTG GTC AGG AAG GGC AA	[SEQ ID NO: 28]
vβ7	TAC CTG ATC AAA AGA ATG GGA GA	[SEQ ID NO: 29]
vβ8.1	ATA ACC ATG ACA ATA TGT ACT GG	[SEQ ID NO: 30]
vβ8.2	ATA ACC ACA ACA ACA TGT ACT GG	[SEQ ID NO: 31]
vβ8.3	ATA GCC ACA ACT ACA TGT ACT GG	[SEQ ID NO: 32]

3.

vβ9	AGC TTG CAA GAG TTG GAA AAC CA	[SEQ ID NO: 33]
vβ10	GAT TAT GTT TAG CTA CAA TAA TA	[SEQ ID NO: 34]
vβ11	ACA AGG TGA CAG GGA AGG GAC AA	[SEQ ID NO: 35]
vβ12	ACC TAC AGA ACC CAA GGA CTC AG	[SEQ ID NO: 36]
vβ13	CAG TTG CCC TCG GAT CGA TTT TC	[SEQ ID NO: 37]

4.

vβ14	GCC GAG ATC AAG GCT GTG GGC AG	[SEQ ID NO: 38]
vβ15	AGA ACC ATC TGT AAG AGT GGA AC	[SEQ ID NO: 39]
vβ16	CAT CAA ATA ATA GAT ATG GGG CA	[SEQ ID NO: 40]
vβ17	GTA GTC CTG AAA AAG GGC ACA CT	[SEQ ID NO: 41]
vβ18	CAT CTG TCA AAG TGG CAC TTC A	[SEQ ID NO: 42]

FIG. 6B

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9	18	27	36	45	54	
ATG AAA TCC TTG AGT GTT TCC CTA GTG GTC CTG TGG CTC CAG TTA AAC TGG GTG	[SEQ ID NO: 43]					

Met Lys Ser Leu Ser Val Ser Leu Val Val Leu Trp Leu Gln Leu Asn Trp Val	[SEQ ID NO: 44]					
63	72	81	90	99	108	
CAG AGC CAG CAG AAG GTG CAG CAG AGC CCA GAA TCC CTC AGT GTC CCA GAG GGA						

Gln Ser Gln Gln Lys Val Gln Gln Ser Pro Glu Ser Leu Ser Val Pro Glu Gly						
117	126	135	144	153	162	
GGC ATG GCC TCT CTC ACC TGC ACT TCA AGT GAT CGC AAT TTT CAG TAT TTC TGG						

Gly Met Ala Ser Leu Asn Cys Thr Ser Ser Asp Arg Asn Phe Gln Tyr Phe Trp						
171	180	189	198	207	216	
TGG TAC AGA CAG CAT TCT GGA GAA GGC CCC AAA GCA CTG ATG TCC ATC TTC TGG						

Trp Tyr Arg Gln His Ser Gly Glu Gly Pro Lys Ala Leu Met Ser Ile Phe Ser						

FIG. 7A

FIG. 7A

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225 234 243 252 261 270
GAT GGT GAC AAG AAA GAA GGC AGA TTC ACA GCT CAC CTC AAT AAG GCC AGC CTG

Asp Gly Asp Lys Lys Glu Gly Arg Phe Thr Ala His Leu Asn Lys Ala Ser Leu

279 288 297 306 315 324
CAT GTT TCC CTG CAC ATC AGA GAC TCC CAG CCC AGT GAC TCC GCT CTC TAC TTC

His Val Ser Leu His Ile Arg Asp Ser Gln Pro Ser Asp Ser Ala Leu Tyr Phe

333 342 351 360 369 378
TGT GCA GTT ATG GAT TAT AAC CAG GGG AAG CTT ATC TTT GGG CAG GGT ACC AAG

Cys Ala Val Met Asp Tyr Asn Gln Gly Lys Leu Ile Phe Gly Gln Gly Thr Lys

387
TTA TCT ATC AAG CCC 3'

Leu Ser Ile Lys Pro

FIG. 7B

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9 18 27 36 45 54
ATG GGC TCC AGA CTC TTC TTT GTG GTT TTG ATT CTC ATG TGT GCA AAA CAC ATG [SEQ ID NO: 45]

Met Gly Ser Arg Leu Phe Phe Val Val Leu Ile Leu Leu Cys Ala Lys His Met [SEQ ID NO: 46]

63 72 81 90 99 108
GAG GCT GCA GTC ACC CAA AGT CCA AGA AGC AAG GTG GCA GTA ACA GGA GGA AAG

Glu Ala Ala Val Thr Gln Ser Pro Arg Ser Lys Val Ala Val Thr Gly Gly Lys

117 126 135 144 153 162
GTG ACA TTG AGC TGT CAC CAG ACT AAT AAC CAT GAC TAT ATG TAC TGG TAT CGG

Val Thr Leu Ser Cys His Gln Thr Asn Asn His Asp Tyr Met Tyr Trp Tyr Arg

171 180 189 198 207 216
CAG GAC ACG GGG CAT GGG CTG AGG CTG ATC CAT TAC TCA TAT GTC GCT GAC AGC

Gln Asp Thr Gly His Gly Leu Arg Leu Ile His Tyr Ser Tyr Val Ala Asp Ser

FIG. 7C

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225	234	243	252	261	270
ACG GAG AAA GGA GAT ATC CCT GAT GGG TAC AAG GCC TCC AGA CCA AGC CAA GAG					
---	---	---	---	---	---
Thr Glu Lys Gly Asp Ile Pro Asp Gly Tyr Lys Ala Ser Arg Pro Ser Gln Glu					
279	288	297	306	315	324
AAT TTC TCT CTC ATT CTG GAG TTG GCT TCC CTT TCT CAG TCA GCT GTA TAT TTC					
---	---	---	---	---	---
Asn Phe Ser Leu Ile Leu Glu Leu Ala Ser Leu Ser Gln Ser Ala Val Tyr Phe					
333	342	351	360	369	378
TGT GCC AGC AGC GAT TTC GCC GGG ACA GGG GGC TTC TAT GAA CAG TAC TTC GGT					
---	---	---	---	---	---
Cys Ala Ser Ser Asp Phe Ala Gly Thr Gly Gly Phe Tyr Glu Gln Tyr Phe Gly					
387	396				
CCC GGC ACC AGG CTC ACG GTT TCT 3'					
---	---				
Pro Gly Thr Arg Leu Thr Val Ser					

FIG. 7D

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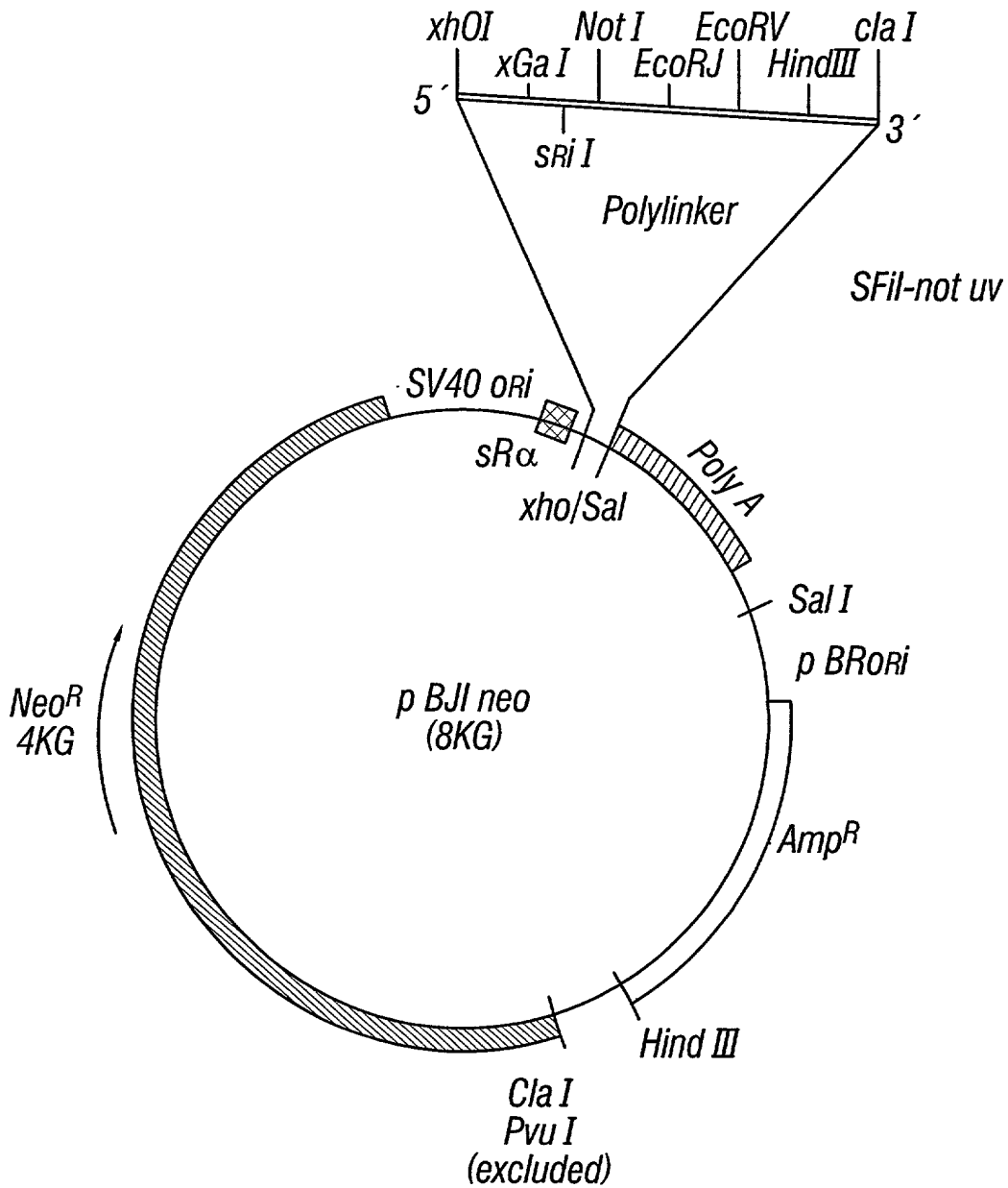


FIG. 8

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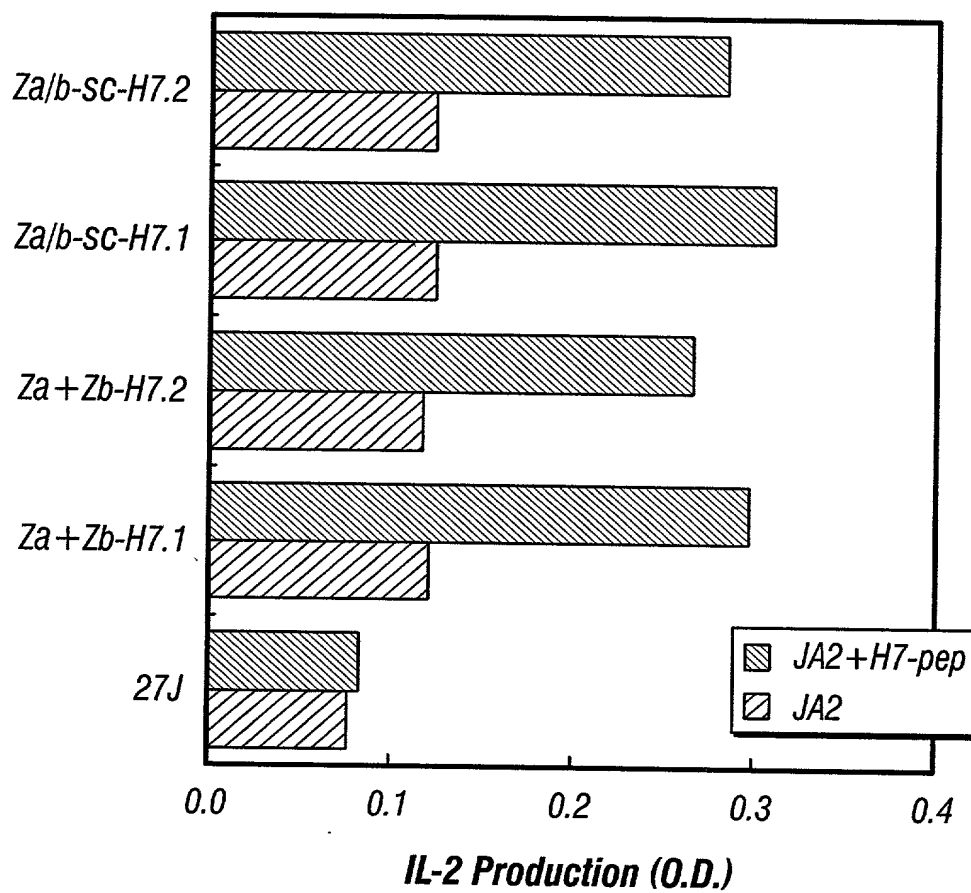


FIG. 9

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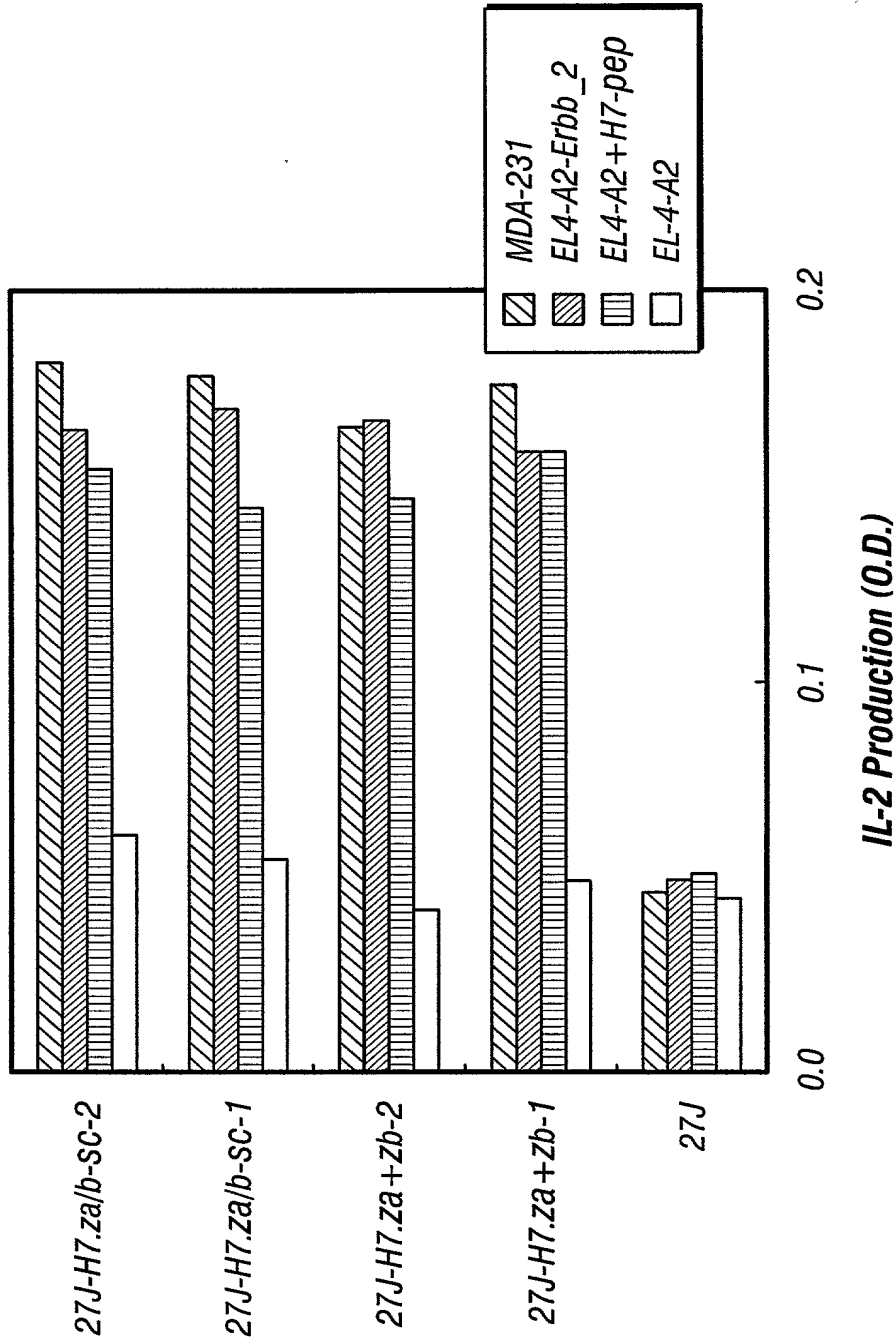


FIG. 10